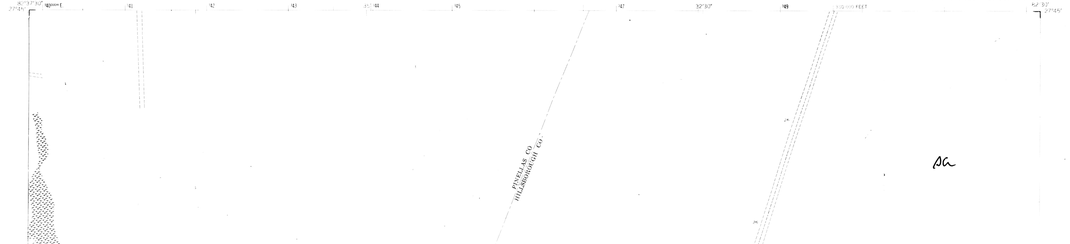
T 19 89½ · 85(15) map A 12

I 49.89/2:85(15) map A12

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COCKROACH BAY QUADRANGLE
FLORIDA
7.5 MINUTE SERIES (TOPOGRAPHIC)

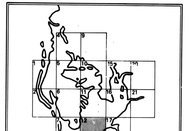


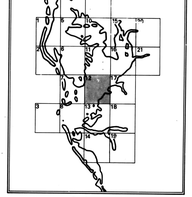
MAP A12

TAMPA BAY ENVIRONMENTAL ATLAS

BIOLOGICAL RESOURCES

COCKROACH BAY





Scale 1:24,000

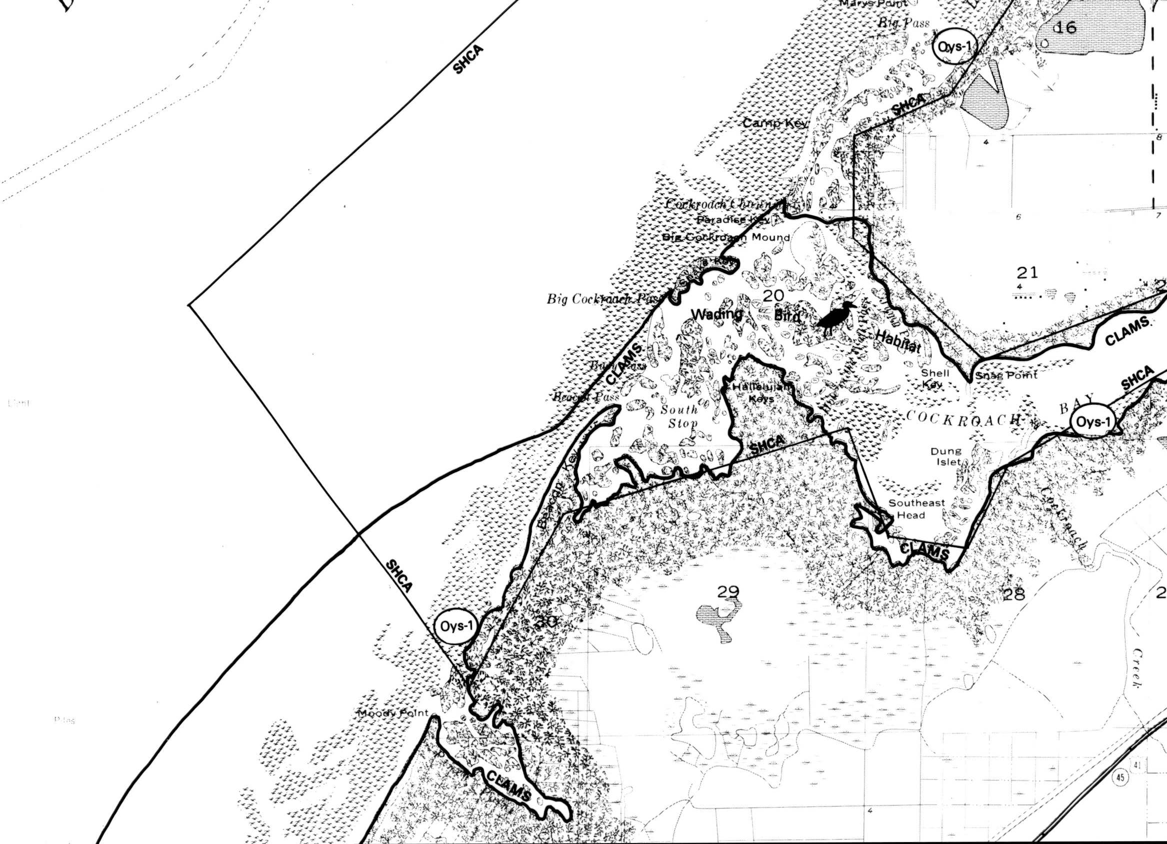
1984

TOPICAL MAPS IN THIS ATLAS:
A. BIOLOGICAL RESOURCES
B. WATER RESOURCES

Produced by U.S. Fish and Wildlife Service
Projection and 1,000 meter grid, zone 17 Universal Transverse Mercator
10,000 foot grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from Federal, State and Local government agencies and other sources.

Light
Light
ST PETERSBURG CORPORATE BOUNDARY
PINELLAS CO
HILLSBOROUGH CO
TAMPA
Light
ANCHORAGE


Marys Point
Big Pass
16
Oys-1
SHCA
Camp Key
Cockroach Channel
Paradise Key
Big Cockroach Mound
Big Cockroach Pass
20
Wading Bird Habitat
21
CLAMS
Shell Key
Snag Point
SHCA
Beacon Pass
Hallelujah Keys
South Stop
COCKROACH BAY
Oys-1
SHCA
Dung Islet
Southeast Head
CLAMS
Beacon Key
SHCA
29
28
Cockroach Creek
30
Oys-1
Moody Point
CLAMS
41
45

Transverse Mercator
10,000-foot grid ticks based on Florida coordinate system, east and west zones

Overlay material compiled in 1984 from latest available data obtained from Federal, State and Local government agencies and other sources.

There are no maps A19, A20, A21 due to a lack of data.

LEGEND

SHELLFISH HARVEST AREA
(Florida Dept. of Natural Resources)

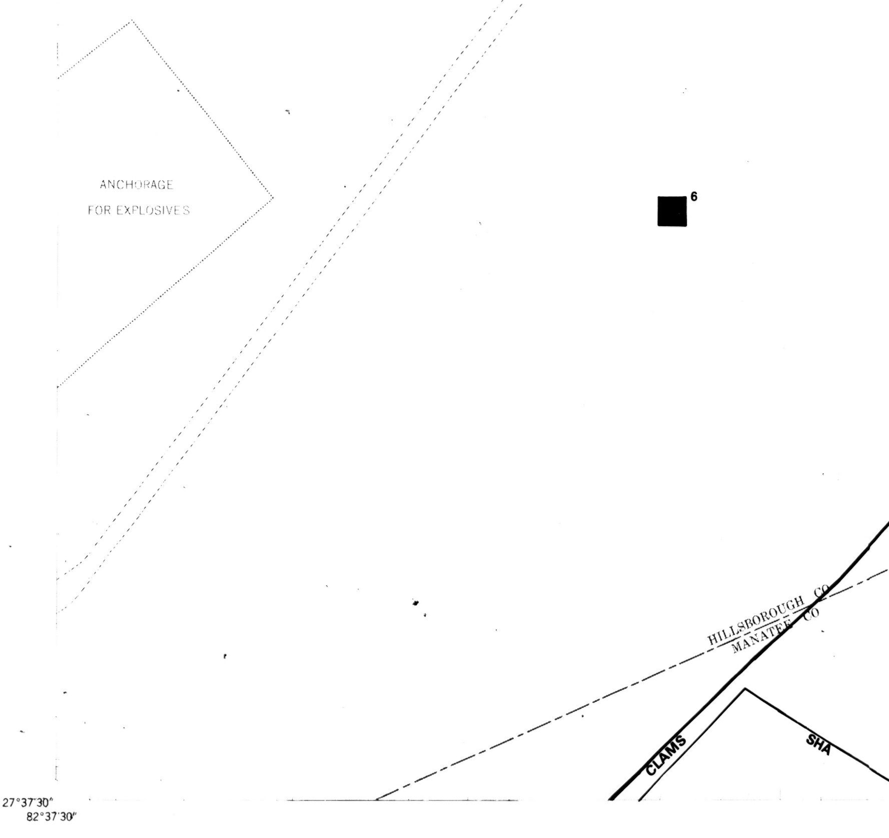
SHA	Shellfish Harvest Approved
SHCA	Shellfish Harvest Conditionally Approved

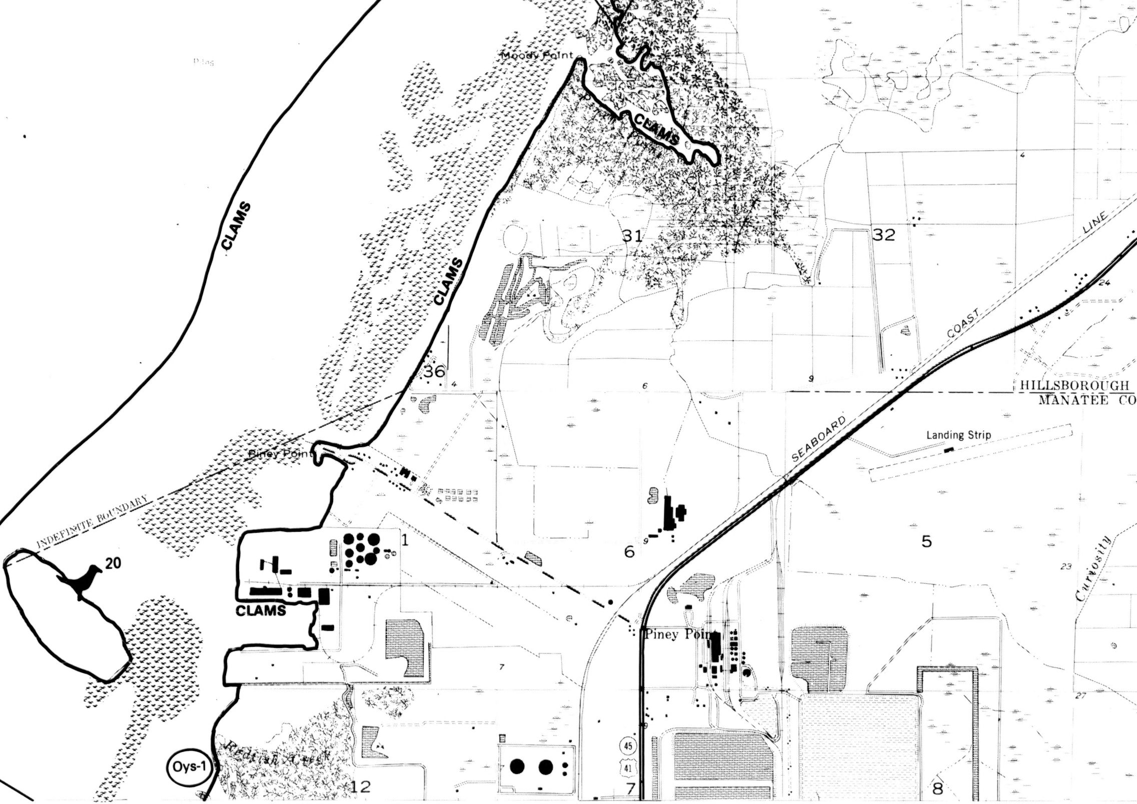
NOTE: Due to Dept. of Natural Resources (DNR) water quality standards all other estuarine areas are prohibited or unclassified as to shellfish harvest status and are officially unapproved. For further info. on status of harvest areas contact DNR - Shellfish Environmental Assessment Section.

Oys-1	Public Oyster Bed
Oys-2	Private Oyster Bed (Lease)
CLAMS	Clam Bed

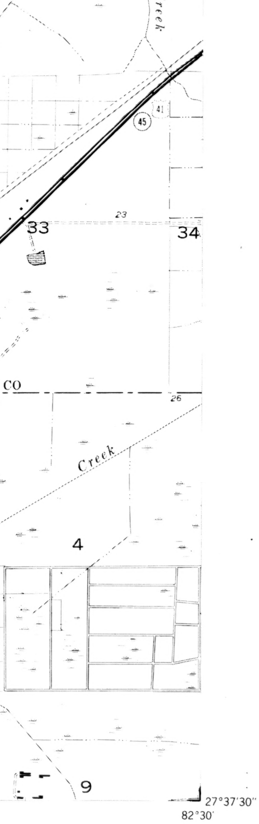
FINFISH SPAWNING, NURSERY AND HARVEST AREAS
(Recreational Hook and Line Fishing)

SPECIES #	FINFISH CATEGORY Common Name	SPAWNING		NURSERY AREA[1]	MAJOR NURSERY HABITATS							AREA OF ADULT ABUNDANCE[1]	MAJOR ADULT HABITATS						MIGRATION TYPE[2]
		LOCATION[1]	SEASON J M M J S N		Seagrass	Mangrove	Saltmarsh	Beach	Coral Reef	Artificial Reef	Open Water		Seagrass	Mangrove	Beach	Coral Reef	Artificial Reef	Open Water	
	ESTUARINE DEPENDENT FISHES																		
1	Red Drum	C	■□□□□□□□■■■■	E	●	●	●					E	●	●	●				2
2	Spotted Seatrout	E	□■■■■■■■■■□□	E	●	●	●					E	●	●					2


ANCHORAGE
FOR EXPLOSIVES
6
HILLSBOROUGH CO
MANATEE CO
CLAMS
SHA
27°37'30"
82°37'30"


Moody Point
CLAMS
CLAMS
CLAMS
31
32
LINE
COAST
SEABOARD
24
36
4
6
9
HILLSBOROUGH
MANATEE CO
Landing Strip
Piney Point
INDEFINITE BOUNDARY
20
1
CLAMS
6
9
5
23
Curiosity
Piney Point
7
27
45
41
Redfish Creek
Oys-1
12
7
8

SCALE 1:24 000


reek
45
41
23
33
34
CO
26
Creek
4
9
27°37'30"
82°30'

(Recreational Hook and Line Fishing)

SPECIES #	FINFISH	SPAWNING													NURSERY AREA[1]	MAJOR NURSERY HABITATS							AREA OF ADULT ABUNDANCE[1]	MAJOR ADULT HABITATS						MIGRATION TYPE[2]
	CATEGORY Common Name	LOCATION[1]	SEASON													Seagrass	Mangrove	Saltmarsh	Beach	Coral Reef	Artificial Reef	Open Water		Seagrass	Mangrove	Beach	Coral Reef	Artificial Reef	Open Water	
			J		M		M		J		S		N																	
	ESTUARINE DEPENDENT FISHES																													
1	Red Drum	C	▬	▬							▬	▬	▬	▬	E	●	●	●					E	●	●	●				2
2	Spotted Seatrout	E			▬	▬	▬	▬	▬	▬	▬	▬			E	●	●	●					E	●	●					2
3	Snook	C					▬	▬	▬						E	●	●	●					E	●	●					2
4	Sheepshead	C			▬	▬	▬								C	●							C-E			●		●		1
5	Southern Flounder	C									▬	▬	▬	▬	C-E	●			●				C-E	●		⊘				2
6	Florida Pompano	CS				▬	▬	▬	▬	▬	▬	▬			C-E				●				C-E			●			●	3
7	Striped Mullet	CS	▬									▬	▬	▬	E	●	●	●					E	●	●	●				3
8	Gulf Menhaden	C	▬	▬	▬								▬	▬	E	●	●	●					C-E	●		●			●	3
9	Spanish Sardine	C						▬	▬	▬	▬				E	●	●	●					C-E	●		●			●	3
10	Black Drum	C	▬	▬	▬	▬	▬						▬	▬	E	●	●	●					E	●	●	●				1
	REEF FISHES																													
11	Red Grouper	CS			▬	▬	▬	▬							CS-C	●				●	●		CS				●	●		2
12	Jewfish	CS							▬	▬					CS-C	●				●	●		CS-C				●	●		2
13	Gag Grouper	CS	▬	▬	▬	▬								▬	CS-C	●				●	●		CS-C				●	●		2
14	Scamp	CS			▬	▬									CS	●				●	●		CS				●	●		2
15	Red Snapper	CS							▬	▬	▬	▬			CS-C	●				●	●		CS-C				●	●		2
16	Mangrove Snapper	CS				▬	▬	▬	▬	▬					C-E	●	●						C-E				●	●		2
	COASTAL PELAGIC FISHES																													
17	King Mackerel	OCS					▬	▬	▬	▬	▬				CS							●	CS-C				●	●	●	4
18	Spanish Mackerel	CS					▬	▬	▬	▬	▬				CS							●	CS-C				●	●	●	4

[1]KEY:

E — Estuarine
C — Coastal
CS — Continental Shelf
OCS — Outer Continental Shelf

[2]MIGRATION TYPE:

1 — Residentially Restricted
2 — Random Residential Range
3 — Restricted Migration
4 — Extensive Migration

COLONIAL BIRD NESTING SITE *

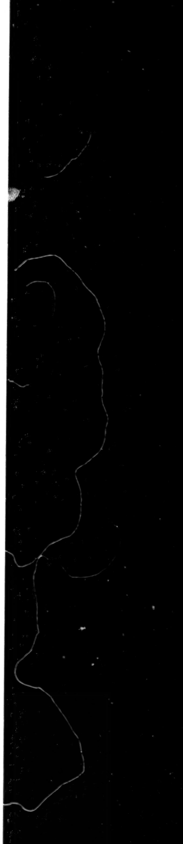
Number appearing with symbol indicates colony sites. Colony sites and species - composition data are included in the narrative.

Shorebird

Wading Bird

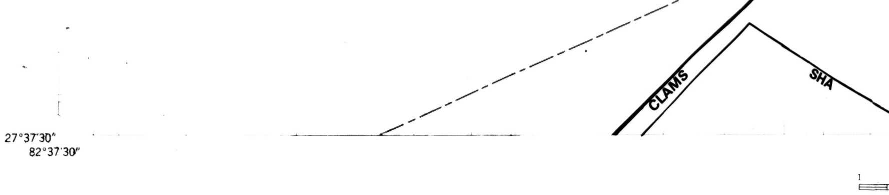
Brown Pelican

WEST INDIAN MANATEE HABITAT



MICROCOPY RESOLUTION TEST CHART
NBS 1010a
(ANSI and ISO TEST CHART No. 2)

1.0



THE TAMPA BAY ENVIRONMENTAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS) FOR COASTAL PLANNERS, DECISION MAKERS AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES A MAJOR PORTION OF THE COASTAL COUNTIES OF PINELLAS, HILLSBOROUGH, MANATEE, AND A SMALL PORTION OF SARASOTA. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION:

SHELLFISH HARVEST AREAS: Shellfish Harvest Area Maps, Dept. of Natural Resources, 1982.

PUBLIC & PRIVATE OYSTER BEDS: Cooperative Gulf of Mexico Estuarine Inventory and Study, Florida, McNulty, Lindall and Sykes, 1972.

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SCALLOP BEDS: Personal Communication, Mr. Bill Lyons Dept. of Natural Resources, Marine Research Laboratory, 1982

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BIRD NESTING SITES: Florida Atlas of Breeding Sites for Herons and Their Allies: 1976-78, Nesbitt, S.A., Ogden, J.C., Kale II, H.W., et.al. U.S. Fish and Wildlife Service, 1982. Personal Communication, Maps and Data, Dr. H.W. Kale II, Florida Audubon Society, 1982

MANATEE HABITAT:
giants, Florida Mari

SEAGRASS BEDS: Ta
1:24,000 Scales, M
National Wetlands
U.S. Fish and Wild

ARTIFICAL REEFS: C
U.S. Army Corps of
in Florida: Artifical
Program, 1979

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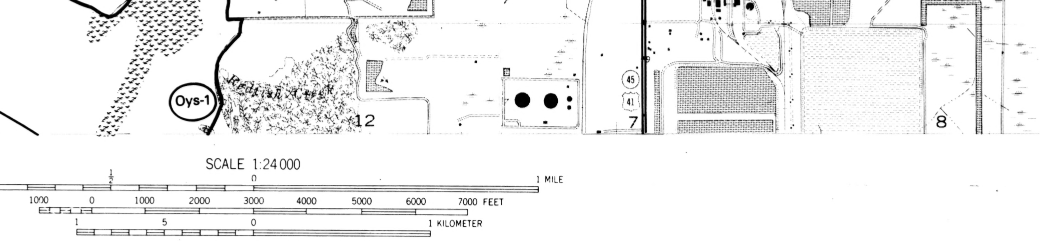
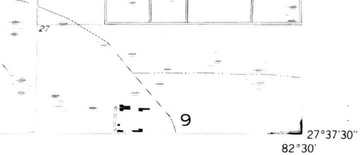


Boaters guide to Manatees, the gentle
ine Patrol, 1980.

ampa Bay Seagrass Maps, 1:10,000 and
Mangrove Systems. Inc. 1980
Inventory Maps, 1:24,000 Scale,
life Service, 1983.

omputer Printout of Florida Artifical Reefs,
Engineers, 1981. Recreational Use Reefs
and Natural, Florida Sea Grant

ERENCE SEE MAP NARRATIVE



composition data are included in the narrative.

Shorebird

Wading Bird

Brown Pelican

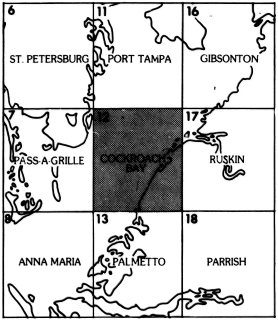
WEST INDIAN MANATEE HABITAT

STATE MANATEE SANCTUARY

▨ **SEAGRASS BEDS**

■ **ARTIFICAL REEF***
(Permitted by Florida Dept. of Environmental Regulation)
Numbers next to reefs refer to composition data in narrative

Symbols appearing with numbers are described more fully in the narrative.



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BEST AVAILABLE COPY

MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)
2.5
2.8
2.2
3.2
2.0
4.5
5.0
3.6
1.8

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
1.0
1.1
1.25
1.4
1.6

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
2.0
1.8
1.5
1.4
1.25